



JPW

PATENT  
P56924

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Chang-Rae *JEONG et al.*

Serial No.: 10/765,126

Examiner: *To be assigned*

Filed: 28 January 2004

Art Unit: 2681

For: MULTI-SECTOR IN-BUILDING REPEATER

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O.Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §1.56, and §§1.97 and 1.98 as amended, Applicant cites, describes, and provides copies of the following art references. Under 37 C.F.R. §1.98(a)(2) however, copies of U.S. patent reference(s) are not provided.

**FOREIGN PATENT REFERENCE:**

- Japanese Patent Publication No. 08-317461 to Kamijo, *et al.*, entitled *MOBILE COMMUNICATION SYSTEM*, published on 29 November 1996 (with English abstract);
- International Patent Publication No. WO 01/33878 to Weissman, *et al.*, entitled *IN-BUILDING RADIO-FREQUENCY COVERAGE*, published on 10 May 2001 (with English abstract).

**OTHER DOCUMENTS:**

- Japanese Office action for Japanese patent application No. 2004-024821 issued on

21 February 2006.

### **DISCUSSION**

**Kamijo, et al. KR'461**, according to the Japanese Office action, discloses that since a forward base station 18 is installed in the radio wave blind zone 16 of the sector S1 within the cell 10 and the radio frequency signals of a frequency allocated to the other sector S3 are branched and transmitted to the forward base station 18, radio interference with the other area within the same sector S1 is not caused and thus, the other radio wave blind zone is not derivatively generated within the sector S1.

**Weissman, WIPO'878** relates to the repeater apparatus for conveying a radio-frequency (RF) signal into an environment closed-off to the RF signal, including a master transceiver unit having a master port which receives the RF signal, a local oscillator (LO), which generates a LO signal at a LO frequency, and a frequency divider which divides the LO frequency of the LO signal by an integer to produce a divided LO signal. The master transceiver unit also includes a master mixer coupled to the master port and the divider which generates an intermediate-frequency (IF) signal responsive to the RF signal and the LO signal. The apparatus includes one or more slave transceiver units, each unit positioned within the environment closed-off to the RF signal and including a frequency multiplier which generates a recovered LO signal at the LO frequency by multiplying the frequency of the divided LO signal by the integer, a slave mixer coupled to the multiplier which generates a recovered RF signal responsive to the recovered LO signal and the IF signal, and a slave port coupled to the slave mixer which receives the recovered RF signal therefrom and transmits the recovered RF signal into the closed-off environment. The apparatus further includes one or more cables coupled between the master transceiver unit and the one or more slave transceiver units which convey the IF signal and the divided LO signal between the master transceiver unit and the one or more slave transceiver units.

The citation of the foregoing references is not intended to constitute an assertion that other or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging and thorough search of the relevant art.

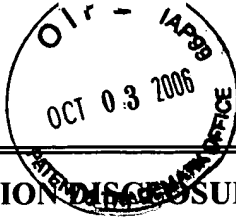
No fee is incurred by this Statement.

Respectfully submitted,



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**INFORMATION DISCLOSURE STATEMENT****PTO-1449 (PAGE 1 OF 1)**

SERIAL NUMBER 10/765,126

DOCKET NO. P56924

APPLICANT Chang-Rae JEONG *et al.*

FILING DATE 28 January 2004

GROUP 2681

**U.S. PATENT DOCUMENTS**

EXAMINER	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE

**FOREIGN PATENT DOCUMENTS****TRANSLATION**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
	JP 08-317461	11/1996	JAPAN			Abstract	
	WO 01/33878	05/2001	WIPO			Abstract	

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)**

	Japanese Office action for Japanese Patent Application No. JP 2004-024821 dated 21 February 2006.

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

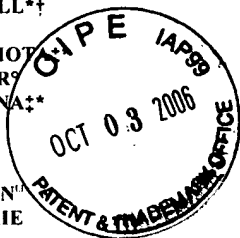
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3 October 2006

Han-Ho Lee, Vice President  
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Re: **U.S. Patent Application For:**  
**MULTI-SECTOR IN-BUILDING**  
**REPEATER**  
Serial No.: 10/765,126  
Chang-Rae JEONG *et al.*  
Priority App. No. KR 2003-6149  
Your Ref.: SPX-200211-0012-US  
Our Ref.: P56924

Dear Mr. Lee:

Thank you for your letter of 28 September 2006.

This is to confirm that we have today prepared and filed the Information Disclosure Statement, together with the reference(s) cited in Japanese Office action dated 21 February 2006 corresponding to Japanese patent application No. 2004-024821.

Enclosed is a copy of the Information Disclosure Statement for your file.

With best regards.

Respectfully submitted,

\_\_\_\_\_  
Robert E. Bushnell

Enclosure: IDS as filed  
REB/nm